

Amendments to the Specification:

Please replace paragraph 49 beginning on page 14 with the following amended paragraph:

DNase I is the most frequently applied endonuclease in footprinting technology. DNase I is initially purified from beef pancreas. It cleaves to both double-stranded and single-stranded DNA. Cleavage preferentially occurs adjacent to pyrimidine residues. DNase I is an endonuclease, meaning cleavage can occur anywhere in the DNA molecule. Major products are ~~5'-phosphorlated~~ 5'-phosphorylated di-, tri- and tetranucleotides. In the presence of magnesium ions (Mg^{2+}), DNase I hydrolyzes each strand of duplex DNA independently, generating random cleavages. In the presence of manganese ions (Mn^{2+}), the enzyme cleaves both strands of DNA at approximately the same site, producing blunt ends or fragments with 1-2 base overhangs. DNase I does not cleave RNA. Genomic DNA that is protected by sequence-specific DNA-binding proteins is not accessible to DNase I and thus left undigested.

Please replace paragraph 51 beginning on page 14 with the following amended paragraph:

Unlike DNase I, the hydroxyl radical is very small. The hydroxyl ~~radical's~~ radical's smaller size allows it to cut DNA anywhere on the sequence. However, because the hydroxyl radical can cleave the DNA strand anywhere, the rates of cleavage of the DNA-protein complex and the naked DNA are very similar making it harder to obtain a candidate fragment. Additionally, the small size of the radical prohibits an

efficient cleavage reaction. Thus, to improve results when using this nuclease, one of skill in the art must use unnicked DNA fragments.

Please replace paragraph 69 beginning on page 20 with the following amended paragraph:

Nucleic acid probe array technology, use of such arrays, analysis array based experiments, associated computer software, composition for making the array and practical applications of the nucleic acid arrays are also disclosed, for example, in the following U.S. Patent Applications: 07/838,607, now abandoned, 07/883,327, now abandoned, 07/978,940, now abandoned, 08/030,138, now abandoned, 08/082,937, now abandoned, 08/143,312, now abandoned, 08/327,522, now abandoned, 08/376,963, now abandoned, 08/440,742, now abandoned, 08/533,582, now allowed, 08/643,822, now abandoned, 08/772,376, now Patent 6,309,822, 09/013,596, now Patent 6,294,327, 09/016,564, now abandoned, 09/019,882, now abandoned, 09/020,743, now Patent 6,420,108, 09/030,028, now Patent 6,335,161, 09/045,547, now Patent 6,201,639, 09/060,922, now abandoned, 09/063,311, now abandoned, 09/076,575, currently pending, 09/079,324, currently pending, 09/086,285, now Patent 6,303,301, 09/093,947, now abandoned, 09/097,675, now Patent 6,203,989, 09/102,167, now abandoned, 09/102,986, now abandoned, 09/122,167, now Patent 6,229,911, 09/122,169, now Patent 6,484,183, 09/122,216, now Patent 6,269,846, 09/122,304, now Patent 6,188,783, 09/122,434, now Patent 6,308,170, 09/126,645, now abandoned, 09/127,115, now Patent 6,197,508, 09/132,368, now abandoned, 09/134,758, now Patent 6,223,127, 09/138,958, now Patent 6,306,643, 09/146,969, now Patent 6,228,585, 09/148,210, now abandoned,

09/148,813, now abandoned, 09/170,847, now Patent 6,185,030, 09/172,190, now Patent 6,262,216, 09/174,364, now Patent 6,489,096, 09/199,655, currently pending, 09/203,677, now Patent 6,258,536, 09/256,301, now Patent 6,177,248, 09/285,658, now Patent 6,582,906, 09/294,293, now Patent 6,171,793, 09/318,775, now Patent 6,271,957, 09/326,137, now Patent 6,653,071, 09/326,374, now Patent 6,218,803, 09/341,302, now abandoned, 09/354,935, now Patent 6,185,561, 09/358,664, now Patent 6,495,320, 09/373,984, now Patent 6,864,050, 09/377,907, now abandoned, 09/383,986, now Patent 6,545,264, 09/394,230, currently pending, 09/396,196, now Patent 6,821,724, 09/418,044, now Patent 6,486,286, 09/418,946, now abandoned, 09/420,805, now Patent 6,287,778, 09/428,350, now Patent 6,361,947, 09/431,964, now Patent 6,340,565, 09/445,734, now Patent 6,368,799, 09/464,350, now abandoned, 09/475,209, now Patent 6,612,737, 09/502,048, now abandoned, 09/510,643, now Patent 6,335,170, 09/513,300, now abandoned, 09/516,388, now abandoned, 09/528,414, currently pending, 09/535,142, now Patent 6,403,317, 09/544,627, now Patent 6,647,341, 09/620,780, currently pending, 09/640,962, now abandoned, 09/641,081, currently pending, 09/670,510, now Patent 6,505,125, 09/685,011, now abandoned, and 09/693,204 now Patent 6,841,348 and in the following Patent Cooperative Treaty (PCT) applications/publications: PCT/NL90/00081, PCT/GB91/00066, PCT/US91/08693, PCT/US91/09226, PCT/US91/09217, WO/93/10161, PCT/US92/10183, PCT/GB93/00147, PCT/US93/01152, WO/93/22680, PCT/US93/04145, PCT/US93/08015, PCT/US94/07106, PCT/US94/12305, PCT/GB95/00542, PCT/US95/07377, PCT/US95/02024, PCT/US96/05480, PCT/US96/11147, PCT/US96/14839, PCT/US96/15606, PCT/US97/01603, PCT/US97/02102,

PCT/GB97/005566, PCT/US97/06535, PCT/GB97/01148, PCT/GB97/01258,
PCT/US97/08319, PCT/US97/08446, PCT/US97/10365, PCT/US97/17002,
PCT/US97/16738, PCT/US97/19665, PCT/US97/20313, PCT/US97/21209,
PCT/US97/21782, PCT/US97/23360, PCT/US98/06414, PCT/US98/01206,
PCT/GB98/00975, PCT/US98/04280, PCT/US98/04571, PCT/US98/05438,
PCT/US98/05451, PCT/US98/12442, PCT/US98/12779, PCT/US98/12930,
PCT/US98/13949, PCT/US98/15151, PCT/US98/15469, PCT/US98/15458,
PCT/US98/15456, PCT/US98/16971, PCT/US98/16686, PCT/US99/19069,
PCT/US98/18873, PCT/US98/18541, PCT/US98/19325, PCT/US98/22966,
PCT/US98/26925, PCT/US98/27405 and PCT/IB99/00048, all the above cited patent
applications and other references cited throughout this specification are incorporated
herein by reference in their entireties for all purposes.